

371 = 11/26/99 FP = 11/27/98

1. (Amended) A LAK activity enhancer containing an extract of *Lentinus edodes* mycelium, which is prepared by preparing a suspension by crushing and delignifying a solid medium containing *Lentinus edodes* mycelia in the presence of water and one or more additive enzymes selected from the group consisting of cellulase, protease and glucosidase, wherein the solid medium is based on bagasse and defatted rice bran; and raising the temperature of the suspension to about 80-100°C to inactivate the enzymes.

2. The LAK activity enhancer of claim 1 for enhancing LAK activity by acting on lymphocytes derived from peripheral blood.

3. The LAK activity enhancer of claim 2 containing an extract of *Lentinus edodes* mycelium at a concentration of 1 µg or more per 10⁶ lymphocytes.

4. An LAK activity-enhancing formulation containing the LAK activity enhancer of claim 1.

5. A pharmaceutical or veterinary LAK activity-enhancing formulation comprising the LAK activity enhancer of claim 1 and a pharmaceutically acceptable carrier.

6. The LAK activity-enhancing formulation of claim 4 or 5 for oral administration.

7. The LAK activity-enhancing formulation of claim 4 in the form of a food, drink or feed.

8. The LAK activity-enhancing formulation of claim 4 or 5 for injection or percutaneous administration.

9. (Amended) The LAK activity-enhancing formulation of claim 4, wherein said formulation is used for treating tumor and/or cancer.

10. (Amended) A method for treating tumor and/or cancer comprising administering an effective amount of the LAK activity-

Please add the following new claims 12-20.

--12. A method for enhancing LAK activity which comprises administering to a mammal a therapeutically effective amount of LAK activity enhancer containing an extract of *Lentinus edodes* mycelium, which is prepared by:

preparing a solution by crushing and delignifying a solid medium containing *Lentinus edodes* mycelia in the presence of water and one or more of additive enzymes(s) selected from the group consisting of cellulase, protease and glucosidase, wherein said solid medium is based on bagasse and defatted rice bran; and

raising the temperature of said suspension to 80-100°C to inactivate the enzyme(s).--

--13. The method of claim 12 wherein said LAK activity enhancer acts on lymphocytes derived from peripheral blood.--

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cont.
--14. The method of claim 12 wherein said LAK activity enhancer contains an extract of *Lentinus edodes* mycelium at a concentration of 1 ug or more per 10^6 lymphocytes.--

--15. The method of claim 12 wherein said LAK activity enhancer further comprises a pharmaceutically acceptable carrier.--

--16. The method of claim 12 wherein said LAK activity enhancer is orally administered.--

--17. The method of claim 12 wherein said LAK activity enhancer is in the form of a food, drink or feed.--

--18. The method of claim 12 wherein said LAK activity enhancer is administered by injection or a percutaneous route.--

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cont.

--19. A method for treating tumor and/or cancer by enhancing LAK activity, which comprises administering a therapeutically effective amount of a LAK activity enhancer containing an extract of Lentinus edodes mycelium that has been extracted from a solid medium comprising bagasse as a base which contains Lentinus edodes mycelia and which is obtainable by the following steps:

delignifying the solid medium;

adding water and one or more enzymes selected from the group consisting of cellulase, protease and glucosidase to the delignified solid medium;

crushing and grinding said delignified solid medium in the presence of said enzyme(s);

inactivating the enzyme(s); and

filtering the resulting suspension.--

--20. A method of preparing a LAK activity enhancer which comprises

preparing a solution by crushing and delignifying a solid medium containing Lentinus edodes mycelia in the presence of water and one or more of additive enzymes(s) selected from the group consisting of cellulase, protease and glucosidase, wherein

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said solid medium is based on bagasse and defatted rice bran;
and

raising the temperature of said suspension to 80-100°C to
inactivate the enzyme(s).--